Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Commission Seeks	)	ET Docket No. 02-135
Public Comment on	)	
Spectrum Policy Task Force	)	
Report	)	

To: The Commission

COMMENTS OF PANAMSAT CORPORATION

PanAmSat Corporation ("PanAmSat") hereby submits these comments in response to the Commission's public notice seeking comment on the Spectrum Policy Task Force Report.[1] PanAmSat endorses the comments of the SIA, but files these separate comments to stress the importance of continued United States leadership in international satellite regulations including spectrum management.

Given that leadership position, the Commission should exercise care in adopting spectrum management approaches, such as spectrum auctions or arbitrary user fees, which could have adverse consequences for the US satellite industry worldwide. There are, however, a number of improvements in spectrum management that the Commission should consider, including increased sharing of spectrum, as long as it does not risk harmful interference to existing and future satellite users.

I. Introduction

PanAmSat owns and operates a global satellite system, which is comprised of geostationary fixed satellite service space stations operating on C-band and Ku-band

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[1] *Commission Seeks Public Comment on Spectrum Policy Task Force Report,* Public Notice, ET Docket No. 02-135, FCC 02-322 (rel. Nov. 25, 2002); *see also Commission Seeks Public*

frequencies.[2] As a company whose business is built upon access to the radio spectrum, PanAmSat has an obvious interest in the Commission's spectrum management policies.[3]

The satellite industry has long benefited from the FCC's forward-thinking spectrum policies, which are properly regarded as a model of spectrum management. The United States' fixed geostationary satellite industry is marked by pervasive and efficient spectrum usage and a robust secondary market. Moreover, "command and control" regulation remains at appropriate levels and reflects the international treaty and regulatory characteristics of satellite technology. Any changes to spectrum policy that would affect the satellite industry should be considered against this backdrop of long-term success.

II. The United States Should Recognize And Promote Its Role As A Leader In Satellite Spectrum Management.

The United States holds a uniquely powerful position with respect to international satellite regulation. By virtue of the large number of US-licensed satellite systems, and the non-US systems that accept FCC jurisdiction in order to gain access to the US market, the FCC has enormous influence on satellite regulatory conditions throughout the world and at the ITU.

As it considers changes to its spectrum policies, the FCC should be aware of the leadership role that it occupies and should reinforce its commitment to a satellite spectrum management model that stresses the global use of satellite spectrum, with its attendant treaty and ITU obligations. Thus, as the SPTF recognized, adherence to

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Comment on Spectrum Policy Task Force Report, Order, ET Docket No. 02-135, DA 02-3400 (rel. Dec. 11, 2002) (extending time for filing comments).

[2] PanAmSat has also been authorized to launch and operate a number of Ka-band satellites.

[3] PanAmSat previously participated in this proceeding. *Reply Comments of PanAmSat Corporation*, ET Docket No. 02-135 (filed July 23, 2002).

international satellite obligations requires continued application of "command and control" regulation in this area.[4]

Further, application of this model to satellite operations is consistent with "the market-oriented approach" that is at the heart of the SPTF's Report.[5] It costs hundreds of millions of dollars to construct, launch, insure, and operate a geostationary satellite system. These costs often exceed the costs of purchasing terrestrial spectrum at auction and provide very strong market-based incentives for satellite operators to use their spectrum efficiently. Finally, the long-standing presence of a robust secondary market for satellite spectrum demonstrates that command and control regulation in this area can foster strong market-driven spectrum management.

As a result of the FCC's leadership role in international satellite spectrum management, eliminating the ORBIT prohibition on satellite spectrum auctions, as proposed by the SPTF, could have disastrous results as governments around the world followed the FCC's lead.[6] Imposition of user fees as a surrogate for auction revenues would be equally damaging. Either of these approaches would trigger similar auctions and fees in other countries, thereby jeopardizing the financial viability of the US satellite industry.

Finally, the Commission should capitalize on its worldwide leadership position by continuing to promote ITU reform, enlightened satellite regulation in other countries, and global harmonization of frequency use, as recommended by the SPTF.

III. Opportunities To Share Spectrum Should Include Appropriate Safeguards.

Satellite operators have a long history of using new technology to achieve greater spectrum efficiency. In this regard, PanAmSat supports the principle of the SPTF's recommendations to increase opportunities to share spectrum through use of new

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[4] SPTF Report at 41-42.
[5] *Id.* at 1.

technology and application of the interference temperature concept. Application of this principle, however, should be considered on a case-by-case basis taking into account the characteristics of the users in specific bands. Any spectrum sharing opportunity, must be carefully designed to ensure that existing and future satellite users are not subjected to harmful interference. US satellite operators require uniform allocations of frequency worldwide. If harmful interference precludes use of spectrum in the US, the affected frequency bands become essentially unusable internationally as well as in the US.

At base, the SPTF's sharing recommendation would permit unlicensed users access to licensed satellite bands, subject to a requirement that these unlicensed users not exceed the band's "interference temperature." As explained by the SPTF, moreover, the interference temperature could grandfather in current interference, permanently raising the noise floor that licensed users must tolerate.[7] For the satellite services, which are power limited and less able to adjust to changes in interference conditions than terrestrial services, this is a worrisome possibility. Experience with radar detectors demonstrates that new and theoretically compatible services can, in practice, cause unintended and unanticipated service interruptions in satellite systems.

Accordingly, the Commission should base all sharing by new, unlicensed technologies on rigorous studies, based both on analysis and field measurements, to assure that service providers and consumers, who have invested billions of dollars in satellite technologies, are not subject to harmful interference. Such testing will assure, as the SPTF recommends, that "licensed spectrum users . . . have flexible and clearly-defined spectrum rights that promote efficient and beneficial spectrum use."[8]

In allowing sharing by underlay systems, the Commission also should take into account the particular characteristics and vulnerabilities of satellite spectrum usage. Specifically, the Commission should consider limiting sharing of satellite spectrum to

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[6] *Id.* at 42.
[7] *Id.* at 29.

satellite uplink frequencies, which are substantially less vulnerable to interference than downlink frequencies. Further, any sharing regime should include US government frequencies, which would have the additional benefit of facilitating harmonization of satellite spectrum worldwide.

IV. Conclusion

PanAmSat applauds the SPTF's comprehensive examination of spectrum policy. As the Commission moves forward, it should build on past success in managing satellite spectrum and should avoid regulations that could inadvertently trigger increased spectrum costs for the US satellite industry or risk an increase of harmful interference to existing and future satellite users.

Respectfully submitted,

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[8] *Id.* at 56.